



QUICK CHILLING AND SHELF LIFE: A SUCCESSFUL COMBINATION

In the institutional catering sector, cooking centres and ready meal factories, it is becoming more and more necessary to plan production cycles separately from the distribution of the food. This involves the use of a quick, hygienically safe production and chilling system. The new **"NILMA Cook & Chill System"** allows freshly cooked sauces, ragouts, soups, stews and béchamel sauces to be packed in bags and then quickly chilled in the new **FASTERCOLD** water-bath chillers. These chillers are able to reduce the

temperature of the bags containing the product evenly and with chilling times more than 50% shorter than with conventional blast chillers. This technology allows compliance with the HACCP procedures and guarantees a product shelf life of more than 20 days. On reactivation, the foods will seem to be as freshly cooked. The new **FASTERCOLD** water-bath chillers are the most modern way of rationalising production in the kitchen. Reducing times and costs, while improving quality and extending product shelf life.

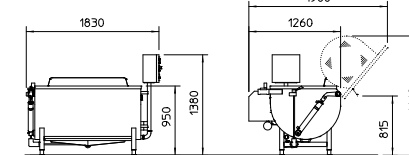


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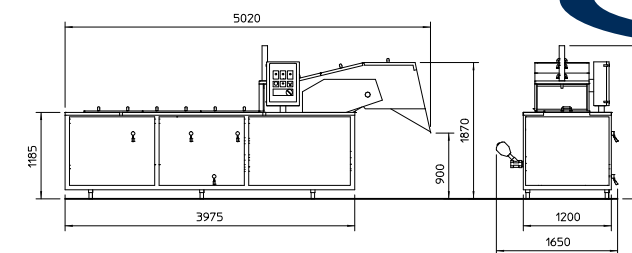


TECHNICAL DRAWINGS

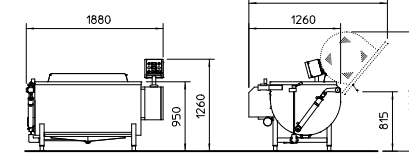
FC-80



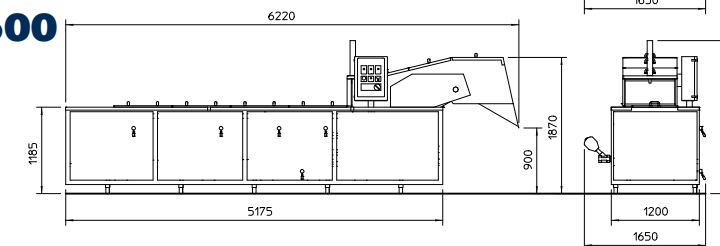
FC-300



FC-120



FC-600



Technical Data	FC-80	FC-120	FC-300	FC-600
Filling water inlet Ø	1"	1"	1" 1/2	1" 1/2
Refrigerated water inlet Ø	2"	2"	1" 1/2	1" 1/2
Chiller return water connection Ø	4"	4"	2"	2" 1/2
Water drain	2"	2"	2" 1/2	2" 1/2
Counter-vat capacity l	600	650	1.500	2.300
Load capacity kg	80	120	300	600
Bag unloading time sec.	25	25	120	120
Compressed air connection Ø	-	-	1/8"	1/8"
Air consumption l/hour	-	-	100	300
Installed power	2,25 kW-3~ 230/400 V. 50 Hz	4,25 kW-3~ 230/400 V. 50 Hz	17,7 kW-3~ 230/400 V. 50 Hz	20,3 kW-3~ 230/400 V. 50 Hz
Approx. refrigeration power required kW	7,5	9,5	18	30
Weight kg	230	250	770	1.150

FC80 and FC120 TECHNICAL FEATURES

CONSTRUCTION

- Constructed entirely in 18/10 stainless steel.
- Vat with rounded corners and adjustable feet.
- Chilling drum with rounded corners.
- On request: vat insulation.

FUNCTIONAL

- Hydraulic system discharges bags by tipping the chilling drum.
- Adjustable water flow generated by motor-driven pumps.
- Automatic regulation of water vortex.
- Automatic water level regulation.
- Appliance fully accessible for inspection and cleaning.
- Control panel in 18/10 stainless steel, IP rating 55, at low voltage 24 volts, including: chilling water temperature control thermostat, chilling time programmer, manual/stop/automatic operating mode switch, power on light, appliance on light, bag discharge control.

FC300 and FC600 TECHNICAL FEATURES

CONSTRUCTION

- Constructed entirely in 18/10 stainless steel.
- 18/10 stainless steel tubular bearing frame, with adjustable feet.
- Bottom grid of chilling drum removable for cleaning.
- Insulated counter-vat and lids.

FUNCTIONAL

- Automatic device for bag discharging.
- Adjustable water flow generated by motor-driven pumps.
- Hydraulic commands with levers for water discharge and chilling vortex regulation.
- Automatic chilling water level adjustment.
- Appliance fully accessible for inspection and cleaning.
- Bag discharge conveyor belt can be removed by hand for cleaning.
- Refrigerated water circulation system with motor-driven pump.
- Control panel in 18/10 stainless steel, IP rating 55, at low voltage 24 volts, including: master switch, chilling water temperature control thermostat, chilling time programmer, manual/stop/automatic operating mode switch, appliance on light, discharge belt stop/start button, emergency stop button.



APPLIANCE CONSTRUCTED TO HARMONISED STANDARDS AND COMPLETE WITH CE MARKING

ISO 9001/2008 certified manufacturer

FASTERCOLD

Water-bath chillers for bags

The revolution of the system

To increase the shelf life of cooked foods well beyond the five days of an ordinary refrigerated product, by preventing the proliferation of bacteria which takes place between 65°C and 8°C after cooking, it is essential to quickly reduce the temperature of foods to below 8°C.

But that is not enough! What can be done about soups, sauces, ragouts, mashed potato, béchamel sauce, and stews, too?

Nilma has produced the **FASTERCOLD**, the innovative water-bath bag chiller, the essential technology in a modern, innovative Cook & Chill system.

After cooking in the Mix Matic or Salsamat universal cookers, a pumping system connected to them transfers the product to the bag filling machine, at over 90°C. The airtight bags, produced in different weights as required, are then soaked into the Fastercold chiller. The bag chilling time varies depending on their weight and the type of product they contain.

An effective cold water vortex

The Fastercold is automatically filled with refrigerated water at 2°C from a remote water cooler connected to it.

Once the chilling time has been programmed, the bags are placed in the drum. The water vortex with adjustable intensity allows the product to cool quickly and evenly. The action of the water whirlpool facilitates heat exchange between the cold water and the bags. It also moves the food around within the bag, enabling it gradually to give up its heat. This provides a rate of heat exchange much higher than with the ordinary blast chiller techniques.

Remote water cooler



Fastercold 300 - pass-through installation



Water vortex movement

Outlet for discharging bags onto rotary table



Everything under control

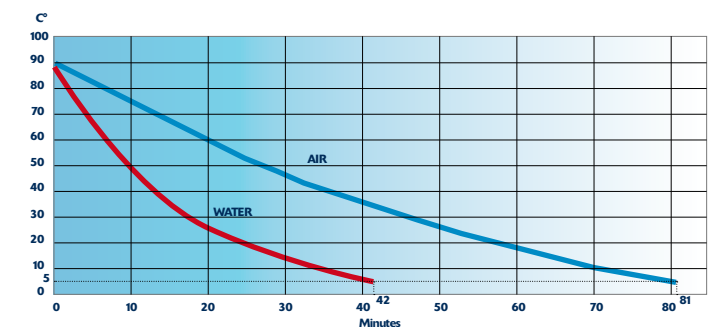
On request, the Fastercold chiller can be connected to the "Creative Control Machine Point", the Nilma patented software that memorises temperature/time chilling functions.

CCMP 4.0, interactive with the chef's remote PC, also performs automatic diagnostics on the appliance, signalling and saving alarms.

The great benefits of shelf life of over 20 days

The foods processed by this Cook & Chill method through to storage in a cold store at 0°C maintain their organoleptic characteristics virtually unchanged for more than 20 days.

This provides a large number of practical benefits, including: production can be scheduled throughout the day and on more than one shift; stocks of food can be kept ready for use; the product's characteristics can be conserved for a long time without freezing it; the product can be conveniently transported to multiple distribution points. All this combined with savings of product, energy, time, space and labour.



TEMPERATURE MEASUREMENTS FOR CHILLING 3 kg BAGS OF TOMATO SAUCE

Handy bags



Preformed or made from coils, heat sealed or clipped, made from suitable material resistant to high temperatures, the bags can be of various shapes and filled with different weights of product depending on requirements.